

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 3 June 2004 (03.06.2004)

(10) International Publication Number

(51) International Patent Classification7:

H04B

WO 2004/047308 A2

(21) International Application Number:

PCT/US2003/035050

(22) International Filing Date:

17 November 2003 (17.11.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/426,541

15 November 2002 (15.11.2002)

(71) Applicant (for all designated States except US): WIDEFI, INC. [US/US]; 476 Hwy A1A, Suite 3, Satellite Beach, FL 32937 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): PROCTOR, James, A., Jr. [US/US]; c/o WiDeFi, Inc., 476 Hwy A1A, Suite 3, Satellite Beach, FL 32937 (US). GAINEY, Kenneth, M. [US/US]; c/o WiDeFi, Inc., 476 Hwy A1A, Suite 3, Satellite Beach, FL 32937 (US).

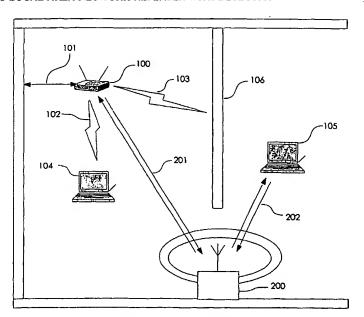
- (74) Agent: POSZ, David, G.; Posz & Bethards, PLC, 11250 Roger Bacon Drive, Suite 10, Reston, VA 20190 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: WIRELESS LOCAL AREA NETWORK REPEATER WITH DETECTION



(57) Abstract: A frequency translating repeater (200) for use in a time division duplex radio protocol communications system includes an automatic gain control feature. Detection is performed by comparators (401, 411) ADCs (402, 412), DACs (404, 414) and a processor (315). Detection can be overridden by processor (315) using logic elements (406, 416, 407, and 417) to control the generation of a Channel A/Channel B signal and a PA_ON signal for controlling a power amplifier associated with the transmitter.





Rec'd PCT/PTO 03 MAY 2005

INTERNATIONAL SEARCH REPORT

International application No. PCT/US03/35050

| A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : H04J 15/00 | | | |
|---|--|---|-----------------------------|
| US CL: 370/464 According to International Patent Classification (IPC) or to both national classification and IPC | | | |
| B. FIELDS SEARCHED | | | |
| Minimum documentation searched (classification system followed by classification symbols) U.S.: 370/464, 310, 252, 302, 315, 315, 332, 341, 343, 464 | | | |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched | | | |
| | | | |
| Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) | | | |
| | | | |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
| Category * | Citation of document, with indication, where a | ppropriate, of the relevant passages | Relevant to claim No. |
| A | US 5,214,788 A (DELAPERRIERE et al) 25 May | 1993, Figure 2. | 1-47 |
| A | US 4,509,206 A (CARPE et al) 02 April 1985, Abstract. | | 1-47 |
| A | US 4,723,302 A (FULMER et al) 02 February 1988, Abstract. | | 1-47 |
| | | • | |
| | | | |
| | · | · | |
| | | | |
| | | | |
| | | | |
| | | • • | · |
| | | | |
| | | | |
| | | · | |
| Further documents are listed in the continuation of Box C. See patent family annex. | | | |
| * Special categories of cited documents: "T" later document published after the international filing date or priori date and not in conflict with the application but cited to understand | | | |
| | defining the general state of the art which is not considered to be lar relevance | principle or theory underlying the inver- | ntion |
| 1 | plication or patent published on or after the international filing date | "X" document of particular relevance; the c considered novel or cannot be considered when the document is taken alone | |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | | "Y" document of particular relevance; the c | laimed invention cannot be |
| • • | referring to an oral disclosure, use, exhibition or other means | combined with one or more other such being obvious to a person skilled in the | documents, such combination |
| "P" document published prior to the international filing date but later than the priority date claimed "&" | | document member of the same patent fa | nmily |
| Date of the actual completion of the international search | | Date of mailing of the international search report | |
| 26 April 2004 (26.04.2004) | | 21 MAY 2004 | 1 11 |
| | ailing address of the ISA/US | Authorized officer | te-Kily |
| Mail Stop PCT, Attn: ISA/US Commissioner for Patents | | Wellington Chin | / |
| P.O. Pow 1450 | | Telephone No. (703)308-1782 | |
| Facsimile No. (703) 305-3230 | | | |
| POTUDA (010 (| | | |

Form PCT/ISA/210 (second sheet) (July 1998)